



Complete Summary

TITLE

Use of imaging studies for low back pain: percentage of members with a primary diagnosis of low back pain who did not have an imaging study (plain x-ray, MRI, CT scan) within 28 days of the diagnosis.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS® 2009: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2008 Jul. various p.

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess percentage of members with a primary diagnosis of low back pain who did not have an imaging study (plain X-ray, magnetic resonance imaging [MRI], computed tomography [CT] scan).

The measure is reported as an inverted rate [1 minus (numerator/denominator)]. A higher score indicates appropriate treatment of low back pain (i.e., the proportion for whom imaging studies did not occur).

RATIONALE

Low back pain is a common cause of lost productivity and work days in the U.S. Half of American adults will experience low back pain in any given year; 2 in 3 will suffer low back pain at some point in their life. Low back pain is a common reason

for patient visits to the physician. According to the American College of Radiology, uncomplicated acute low back pain is usually benign and self-limiting, and does not call for imaging studies, such as X-rays, magnetic resonance imaging (MRIs) or computed tomography (CT) scans. Most patients return to their usual activities in a month. However, a small portion of this large patient population will need to be evaluated further to investigate more serious health problems.

Imaging studies are frequently overused in the evaluation of patients with acute low back pain. While imaging may be appropriate for patients at risk for more serious conditions, for most patients low back pain is nonspecific with no identifiable cause.

PRIMARY CLINICAL COMPONENT

Low back pain; imaging studies (plain X-ray, magnetic resonance imaging [MRI], computed tomography [CT] scan)

DENOMINATOR DESCRIPTION

Members age 18 years as of January 1 of the measurement year to 50 years as of December 31 of the measurement year, with a Negative Diagnosis History, who had an outpatient or emergency department (ED) visit with a primary diagnosis of low back pain (see the "Description of Case Finding" and the "Denominator Inclusions/Exclusions" fields in the Complete Summary)

NUMERATOR DESCRIPTION

An imaging study conducted on the Index Episode Start Date (IESD) or in the 28 days following the IESD (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Use of this measure to improve performance
Variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

National Committee for Quality Assurance (NCQA). The state of health care quality 2008: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2008. 131 p.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Accreditation
Decision-making by businesses about health-plan purchasing
Decision-making by consumers about health plan/provider choice
External oversight/Medicaid
External oversight/State government program
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Managed Care Plans

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age 18 to 50 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Abnormalities found when imaging people without back pain are just as prevalent as those found in patients with back pain.

See also the "Rationale" field.

EVIDENCE FOR INCIDENCE/PREVALENCE

Koes BW, van Tulder MW, Thomas S. Diagnosis and treatment of low back pain. BMJ2006 Jun 17;332(7555):1430-4. [25 references] [PubMed](#)

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

- Complications from unnecessary surgery can potentially increase the duration of low back pain.
- The duration of low back pain significantly correlates with decreased quality of life and disability more than the severity of the low back pain.

EVIDENCE FOR BURDEN OF ILLNESS

Jarvik JG, Hollingworth W, Martin B, Emerson SS, Gray DT, Overman S, Robinson D, Staiger T, Wessbecher F, Sullivan SD, Kreuter W, Deyo RA. Rapid magnetic resonance imaging vs radiographs for patients with low back pain: a randomized controlled trial. JAMA2003 Jun 4;289(21):2810-8. [PubMed](#)

Kovacs FM, Abaira V, Zamora J, Teresa Gil del Real M, Llobera J, Fernandez C, Bauza JR, Bauza K, Coll J, Cuadri M, Duro E, Gili J, Gestoso M, Gomez M, Gonzalez J, Ibanez P, Jover A, Lazaro P, Llinas M, Mateu C, Mufraggi N, Muriel A, Nicolau C, Olivera MA, Pascual P, Perello L, Pozo F, Revuelta T, Reyes V, Ribot S, Ripoll J, Ripoll J, Rodriguez E, Kovacs-Atencion Primaria Group. Correlation between pain, disability, and quality of life in patients with common low back pain. Spine (Phila Pa 1976)2004 Jan 15;29(2):206-10. [PubMed](#)

UTILIZATION

Unspecified

COSTS

Low back pain is the most costly ailment in the workplace, averaging of \$8,000 per claim.

EVIDENCE FOR COSTS

Atlas SJ, Deyo RA. Evaluating and managing acute low back pain in the primary care setting. J Gen Intern Med2001 Feb;16(2):120-31. [101 references] [PubMed](#)

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Members age 18 years as of January 1 of the measurement year to 50 years as of December 31 of the measurement year, with a Negative Diagnosis History, who had an outpatient or emergency department (ED) visit with a primary diagnosis of low back pain who were continuously enrolled 180 days prior to the Index Episode Start Date (IESD) through 28 days after the IESD with no gaps in enrollment during the continuous enrollment period

DENOMINATOR SAMPLING FRAME

Enrollees or beneficiaries

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Members age 18 years as of January 1 of the measurement year to 50 years as of December 31 of the measurement year, with a Negative Diagnosis History*, who had an outpatient or emergency department (ED) visit with a primary diagnosis of low back pain

Negative Diagnosis History:* A period of 180 days (6 months) prior to the Index Episode Start Date (IESD) during which the member had no claims/encounters with any diagnosis of low back pain (refer to Tables LBP-A and LBP-B in the original measure documentation for codes to identify low back pain).

Index Episode Start Date (IESD):* The earliest date of service for any outpatient or ED encounter (refer to Table LBP-B in the original measure documentation for codes to identify visit type) during the Intake Period with a primary diagnosis of low back pain (refer to Table LBP-A in the original measure documentation).

****Intake Period:* January 1-December 3 of the measurement year. The Intake Period is used to identify the first outpatient or ED encounter with a primary diagnosis of low back pain.

Note: Refer to the original measure documentation for steps to identify the eligible population.

Exclusions

- Exclude members with any low back pain diagnosis during the 180 days (6 months) of the IESD.
- *Cancer*. Exclude members who have a diagnosis of cancer. Organizations should look as far back as possible in the member's history through the end of the continuous enrollment period.
- *Recent trauma, intravenous drug abuse, neurological impairment*. Exclude members who have any of these diagnoses in the 12 months prior to the IESD through the end of the continuous enrollment period.

Refer to Table LBP-C in the original measure documentation for codes to identify exclusions.

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Encounter

DENOMINATOR TIME WINDOW

Time window brackets index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

An imaging study conducted on the Index Episode Start Date (IESD)* or in the 28 days following the IESD. Refer to Table LBP-D of the original measure documentation in order to identify imaging studies. A diagnosis code from LBP-A must be in conjunction with an imaging study code in Table LBP-D.

Index Episode Start Date (IESD)*: The earliest date of service for any outpatient or emergency department (ED) encounter (refer to Table LBP-B in the original measure documentation for codes to identify visit type) during the Intake Period with a primary diagnosis of low back pain (refer to Table LBP-A in the original measure documentation).

***Intake Period*: January 1-December 3 of the measurement year. The Intake Period is used to identify the first outpatient or ED encounter with a primary diagnosis of low back pain.

Exclusions

Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure**SCORING**

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

This measure requires that separate rates be reported for commercial and Medicaid plans.

STANDARD OF COMPARISON

External comparison at a point in time
External comparison of time trends
Internal time comparison

Evaluation of Measure Properties**EXTENT OF MEASURE TESTING**

Unspecified

Identifying Information

ORIGINAL TITLE

Use of imaging studies for low back pain (LBP).

MEASURE COLLECTION

[HEDIS® 2009: Healthcare Effectiveness Data and Information Set](#)

MEASURE SET NAME

[Effectiveness of Care](#)

MEASURE SUBSET NAME

[Musculoskeletal Conditions](#)

DEVELOPER

National Committee for Quality Assurance

FUNDING SOURCE(S)

Unspecified

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

ENDORSER

National Quality Forum

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2004 Jan

REVISION DATE

2008 Jul

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: National Committee for Quality Assurance (NCQA). HEDIS 2008. Healthcare effectiveness data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2007 Jul. various p.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS® 2009: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2008 Jul. various p.

MEASURE AVAILABILITY

The individual measure, "Use of Imaging Studies for Low Back Pain (LBP)," is published in "HEDIS® 2009. Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications."

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

COMPANION DOCUMENTS

The following is available:

- National Committee for Quality Assurance (NCQA). The state of health care quality 2008: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2008. 131 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

NQMC STATUS

This NQMC summary was completed by ECRI on May 25, 2005. The information was verified by the measure developer on December 15, 2005. This NQMC summary was updated by ECRI on January 31, 2007. The updated information was not verified by the measure developer. This NQMC summary was updated by ECRI Institute on February 28, 2008. The information was verified by the measure developer on April 24, 2008. This NQMC summary was updated again by ECRI Institute on March 12, 2009. The information was verified by the measure developer on May 29, 2009.

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